

4.8 BIOLOGICAL RESOURCES - TERRESTRIAL

This section describes existing habitat and plant and animal species in the proposed Project area, including the Ormond Beach area coastline, Oxnard Plain, and Santa Clarita Valley. Potential impacts on terrestrial ecology from all phases of the Project are identified, and issues raised during the public scoping period are addressed, namely accidental spills, mercaptan releases, and the effects of the Project on wetlands, waters of the United States, and special status species during construction. This section addresses biological resources within 1,000 feet (305 meters [m]) of the pipeline corridor and special status species within 1 mile (1.6 kilometers [km]) of the corridor. This section also contains mitigation measures for each potential impact, as well as an evaluation of impacts on terrestrial biology from proposed Project alternatives.

4.8.1 Environmental Setting

Onshore, the proposed Project includes a shore crossing where the offshore pipelines would cross beneath Oxnard Beach to connect with the proposed Center Road Pipeline to transport natural gas to the Southern California Gas Company (SoCalGas) system. A second onshore pipeline, the Line 225 Pipeline Loop, would also be constructed in Santa Clarita to upgrade the SoCalGas system to handle the volume of natural gas that would be delivered by the proposed Project. The proposed Project is located within three biogeographical areas: the Coastal Zone (Pipeline milepost [MP] 0.0 to MP 0.7), the Oxnard Plain (Center Road Pipeline, MP 0.7 to MP 14.3), and the Santa Clarita Valley (Line 225 Pipeline Loop, MP 0.0 to MP 7.71). Figures 4.8-3 and 4.8-4 show the special status plants, wildlife, and natural communities within 5 miles (8 km) of the proposed Project pipeline routes.

The proposed pipeline routes, the Center Road Pipeline and Line 225 Pipeline Loop, and the various route alternatives being considered traverse similar environmental settings. Engineering studies would determine the final location of the pipeline within the existing roadway. Land uses found along the 14.3-mile (23-km) Center Road Pipeline route and alternatives include agricultural, commercial, and urban residential, which provide limited terrestrial habitat. The Applicant proposes to install most of the natural gas pipelines within existing road rights-of-way to minimize impacts. The Line 225 Pipeline Loop and alternative routes under consideration would be installed within existing road rights-of-way that traverse industrial and open natural areas within the Santa Clarita Valley. The natural gas pipelines would be installed in the road right-of-way (ROW) using a trench construction method.

SoCalGas has a franchise agreement with the local governments and a certificate of public convenience and necessity from the California Public Utilities Commission (CPUC), which allow it to install and use pipes in public streets. Installation of the pipelines beneath surface water features or sensitive habitat that are being evaluated in the document include open girder, closed girder, open cut trench, or horizontal directional drilling. Subsection 2.4.5, "Crossing Techniques," provides specific descriptions of each water-crossing method proposed. Specific water-crossing methods would be determined in consultation with appropriate regulatory agencies during the

permitting process. A jurisdictional wetland delineation survey and report were completed for the proposed Project. The survey identified all wetlands and waters of the United States (U.S.) within the proposed Project pipeline ROW and areas of existing facilities that would be expanded during construction (Entrix 2004b). A more detailed discussion is included in the following subsections.

The Applicant proposes to install the natural gas pipelines within the Ormond Beach Coastal Zone using a horizontal directional drill (HDD). The HDD would bore from the Reliant Energy Ormond Beach Generating Station underneath Ormond Beach to a distance approximately 3,000 feet (914 m) offshore. All construction activities associated with the HDD procedures and installation of the pipelines would be conducted within the Reliant Energy Ormond Beach Generating Station. Therefore, there would be no direct impact on natural vegetative communities in the coastal zone. Impacts to wetlands and sensitive species and their habitat could occur during the HDD procedures to install the pipelines beneath Ormond Beach. An adverse impact could occur if drilling mud were released accidentally within a wetland or sensitive species habitat. Subsection 4.8.4, "Impact Analysis and Mitigation," describes mitigation measures to avoid, minimize, or reduce impacts on Ormond Beach.

4.8.1.1 Coastal Zone

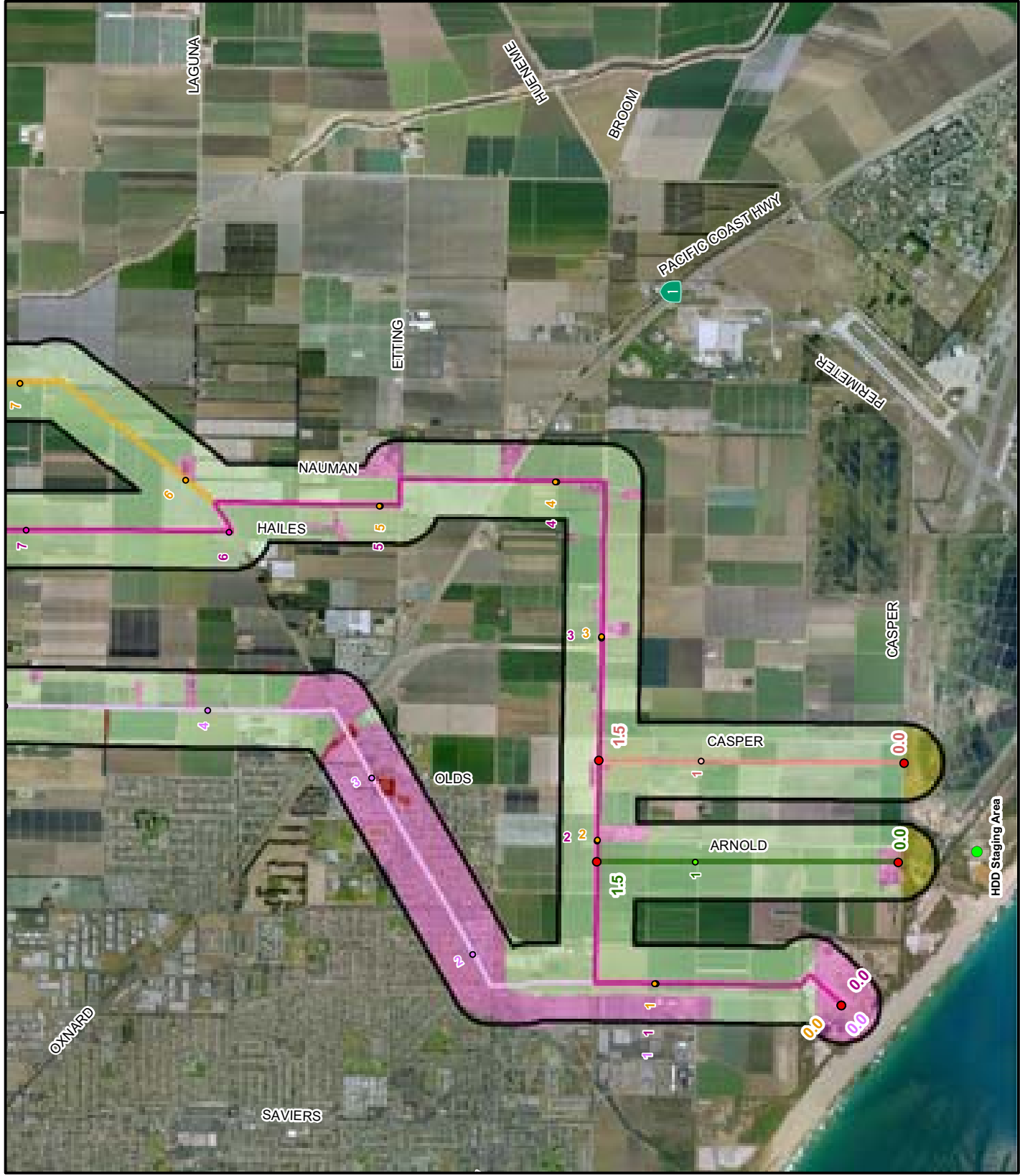
Natural and disturbed coastal zone vegetative communities extend from the Reliant Energy Ormond Beach Generating Station west to the water, northwest, and southeast. The Ormond Beach Metering Station (MP 0.0 to MP 0.2) would be within the Coastal Zone. Habitat present along this segment of the pipeline ROW consists of sandy beaches, wetlands, salt marsh, backdunes, and developed land. A more detailed discussion of the types of habitat found within the Coastal Zone is presented in the following subsections.

Vegetation and Wetlands

Vegetation communities found within the Ormond Beach area consist of a shallow lagoon and marshes. A freshwater lagoon, fed by urban and agricultural runoff and groundwater, also is present within the Ormond Beach area. Vegetative communities found in the coastal zone are listed in Table 4.8-1, at the end of this section. See Figures 4.8-1A, B, and C for a depiction of vegetative communities within the Coastal Zone.

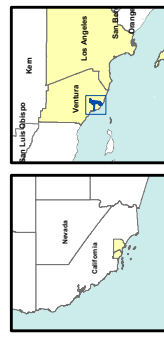
Historically, the Ormond Beach area consisted of approximately 500 acres (202 hectares [ha]) of tide-influenced wetlands that once extended from the Port Hueneme harbor to Mugu Lagoon. Today, only 217 acres (88 ha) of fragmented wetlands are found along 1 mile (1.6 km) of the coast at Ormond Beach (California Resources Agency 2004). Most of the existing wetlands are no longer directly influenced by tidal activities, and receive tidal flow only if berms are breached or existing water control structures (i.e., leaking flap gates) have not been maintained.

119°6'0"W



119°6'0"W

- Milepost
- Center Road Pipeline
- Center Road Pipeline Alternative 1
- Center Road Pipeline Alternative 2
- Arnold Road Shore Crossing/
- Arnold Road Pipeline
- Point Mugu Shore Crossing/
- Casper Road Pipeline
- Santa Barbara Channel Alternative/
- Gonzales Road Pipeline
- 1000 Foot Survey Area
- Disturbed Dunes DD
- Developed Land DL
- Non-Native Grassland NNGL
- Tree Row TR
- Southern Foredues SFD
- Exotic Mixed Riparian Forest EMRF
- Agricultural Land AL
- HDD Staging Area



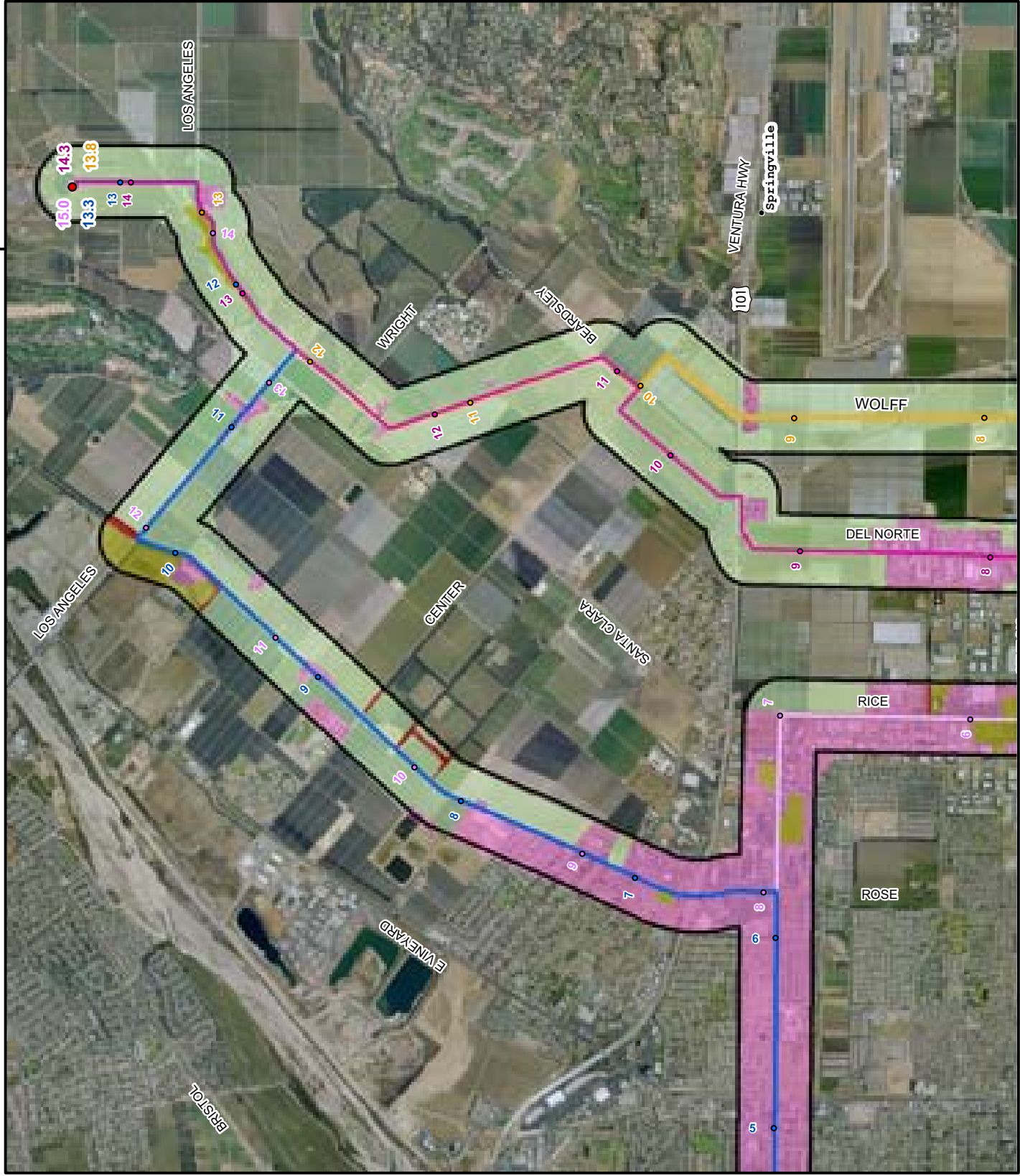
NAD83 CA Stateplane Zone 5 feet

CABRILLO PORT LNG DEEPWATER PORT
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Figure 4.8-1a

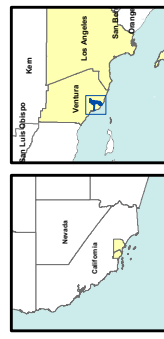
Vegetation Communities along
Pipelines, Ventura County
(1 of 3)

119°6'0"W



119°6'0"W

- Milepost
- Center Road Pipeline
- Center Road Pipeline Alternative 1
- Center Road Pipeline Alternative 2
- Arnold Road Shore Crossing/Arnold Road Pipeline
- Point Mugu Shore Crossing/Casper Road Pipeline
- Santa Barbara Channel Alternative/Gonzales Road Pipeline
- 1000 Foot Survey Area
- Disturbed Dunes DD
- Developed Land DL
- Non-Native Grassland NNGL
- Tree Row TR
- Southern Foredunes SFD
- Exotic Mixed Riparian Forest EMRF
- Agricultural Land AL



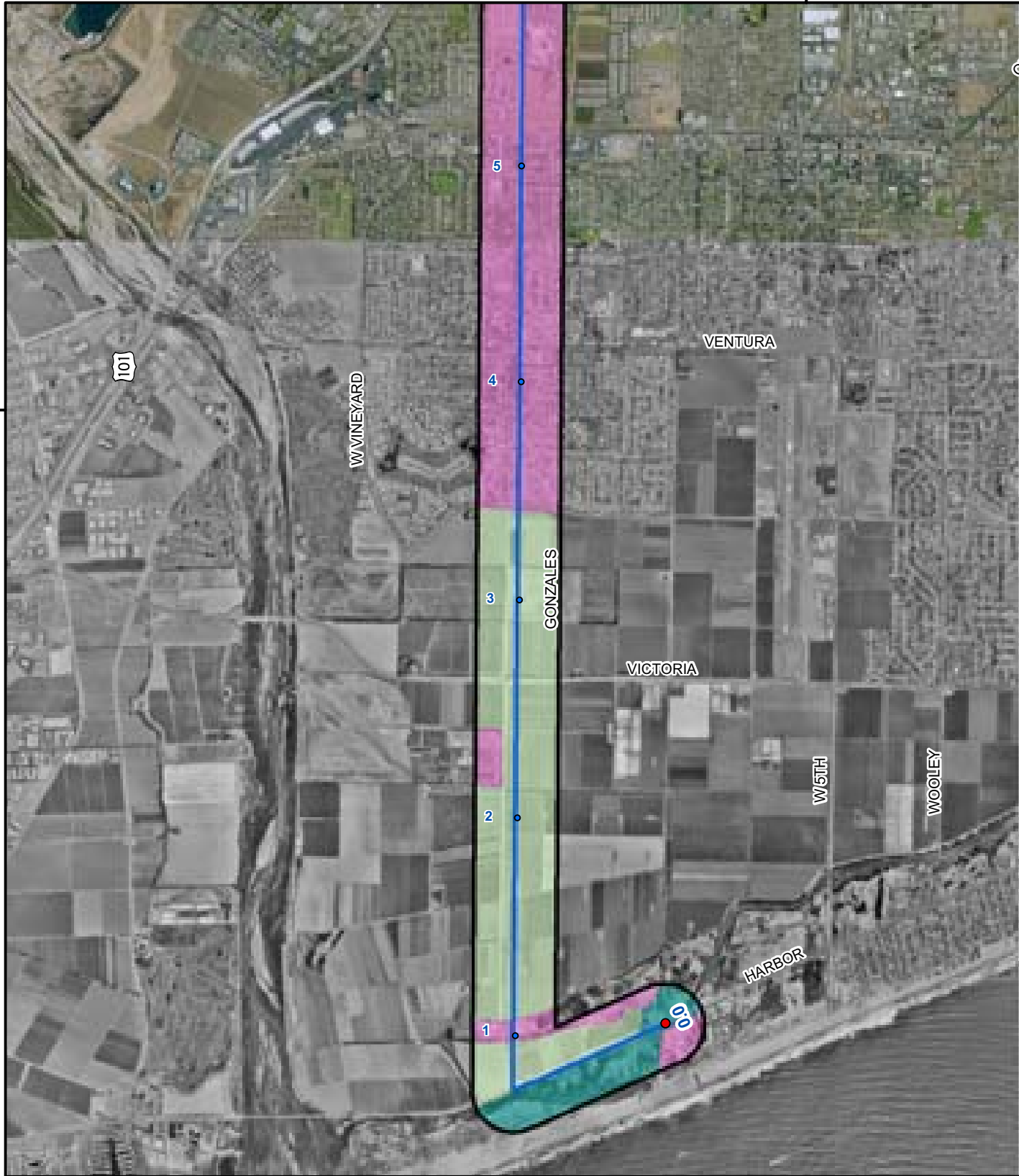
NAD83 CA Stateplane Zone 5 feet

CABRILLO PORT LNG DEEPWATER PORT
EIS/EIR, 2004

Figure 4.8-1b

Vegetation Communities along
Pipelines, Ventura County
(2 of 3)

119°12'0"W



119°12'0"W

Milepost

- Center Road Pipeline
- Center Road Pipeline Alternative 1
- Center Road Pipeline Alternative 2
- Arnold Road Shore Crossing/Arnold Road Pipeline
- Point Mugu Shore Crossing/Casper Road Pipeline
- Santa Barbara Channel Alternative/Gonzales Road Pipeline
- 1000 Foot Survey Area
- Disturbed Dunes DD
- Developed Land DL
- Non-Native Grassland NNGL
- Tree Row TR
- Southern Foredunes SFD
- Exotic Mixed Riparian Forest EMRF
- Agricultural Land AL



NAD83 CA Stateplane Zone 5 feet

CABRILLO PORT LNG DEEPWATER PORT
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Figure 4.8-1c

Vegetation Communities along
Pipelines, Ventura County
(3 of 3)

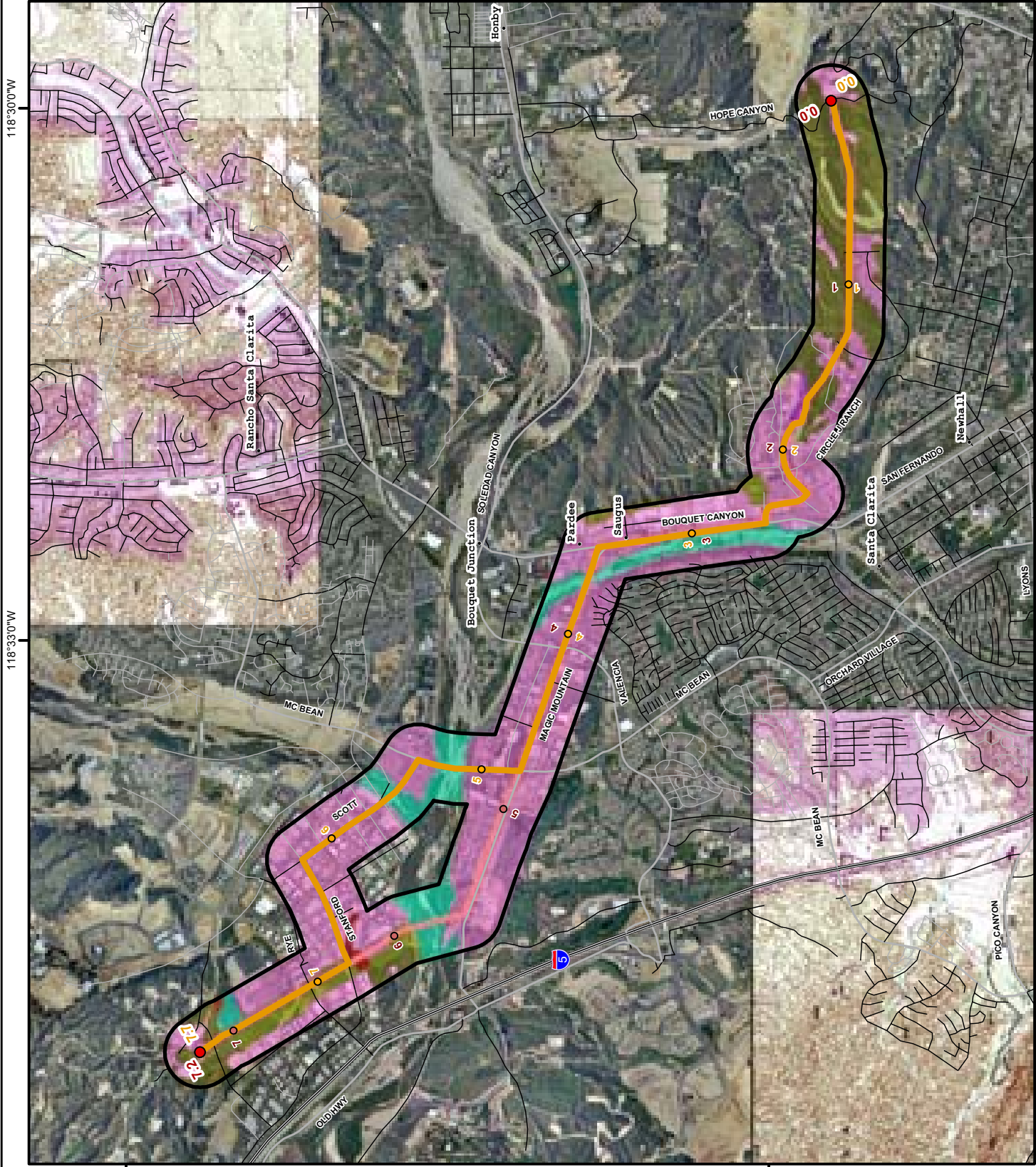


Figure 4.8-2
Vegetation Communities along Pipelines, Los Angeles County

CABRILLO PORT LNG DEEPWATER PORT
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1 The City of Oxnard and the California State Coastal Conservancy have proposed
2 ongoing wetland restoration projects within the Ormond Beach area, which would
3 restore tidal flow to some of the fragmented wetlands. These projects are discussed in
4 Section 4.13, "Land Use."

5 The State Coastal Conservancy is in the planning and environmental analysis stages of
6 a wetland restoration effort. A restoration feasibility study is currently underway for the
7 265 acres (107 ha) of property purchased from Southern California Edison. This
8 feasibility study is expected to be completed by 2005. A jurisdictional wetland
9 delineation survey has been completed. This survey identified all wetlands and waters
10 of the U.S. within the proposed Project pipeline ROW and areas of existing facilities that
11 would be expanded during construction. The wetland delineation survey identified all
12 wetlands and waters of the United States according to the U.S. Army Corps of
13 Engineers (USACE) Wetland Delineation Manual dated 1987, and guidance provided in
14 33 Code of Federal Regulations (CFR) 328, dated 1997, for determination of other
15 waters of the United States. The USACE defines wetlands as areas that are inundated
16 or saturated by surface water or groundwater at a frequency and duration sufficient to
17 support, and under normal circumstances do support, a prevalence of wetland
18 vegetation typically adapted for life in saturated soil conditions. Section 404 of the
19 Clean Water Act (CWA) establishes a program to regulate the discharge of dredged and
20 fill material into waters of the U.S., including wetlands. Activities in waters of the U.S.
21 that are regulated under this program include fills for development, water resource
22 projects, infrastructure development, and conversion of wetlands to uplands for farming
23 and forestry.

24 The USACE is responsible for administering the day-to-day program, including
25 individual permit decisions and jurisdictional determinations. The USACE also develops
26 policy and guidance, and enforces Section 404 provisions. The U.S. Environmental
27 Protection Agency (USEPA) is responsible for developing and interpreting
28 environmental criteria used in evaluating permit applications. The USEPA also
29 approves and oversees State assumption, and identifies activities that are exempt from
30 permitting. Lastly, the USEPA reviews and comments on individual permit applications,
31 and has authority to veto USACE permit decisions.

32 The wetland delineation identified 26 wetland/surface water features. Seven of the
33 wetland/surface water features are potential jurisdictional features, according to the
34 USACE wetland definition. The USACE is responsible for making the final jurisdictional
35 determination for all features identified along the proposed pipeline ROWs. Once the
36 final pipeline route has been selected and the USACE makes the final jurisdictional
37 determination, impacts to wetlands and waters of the United States would be included in
38 the CWA, Section 404, permitting process.

39 **Wildlife and Aquatic Species Species**

40 The Coastal Zone supports a wide variety of common terrestrial species. Wildlife
41 species include raccoons, opossum, coyote, red fox, Audubon's cottontail, California
42 ground squirrel, and western rattlesnake. Common plant species include pickleweed,

cordgrass, and salt grass. The freshwater lagoon and marshes are attractive to various migratory bird species that use the habitat for resting, feeding, and nesting. Previous bird surveys have found as many as 41 different bird species, including special status species (California Resources Agency 2004).

Special Status Species

The California Natural Diversity Database (CNDDDB) identified numerous special status species occurring in the coastal zone near MP 0.0. Special status species that have been identified include California least tern (*Sterna antillarum browni*), western snowy plover (*Charadrius alexandrinus nivosus*), California brown pelican (*Pelecanus occidentalis californicus*), elegant tern (*Sterna elegans*), belding's savannah sparrow (*Vireo bellii pusillus*), peregrine falcon (*Falco peregrinus anatum*), globose dune beetle (*Coelus globosus*), salt marsh skippers (*Panoquina errans*), salt marsh bird's beak (*Cordylanthus maritimus* ssp. *maritimus*), and tidewater goby (*Eucyclogobius newberryi*). Complete lists of special status species potentially occurring within the coastal area are presented in Table 4.8-2, which is placed at the end of this Section. Figure 4.8-3 provides locations of these special status species.

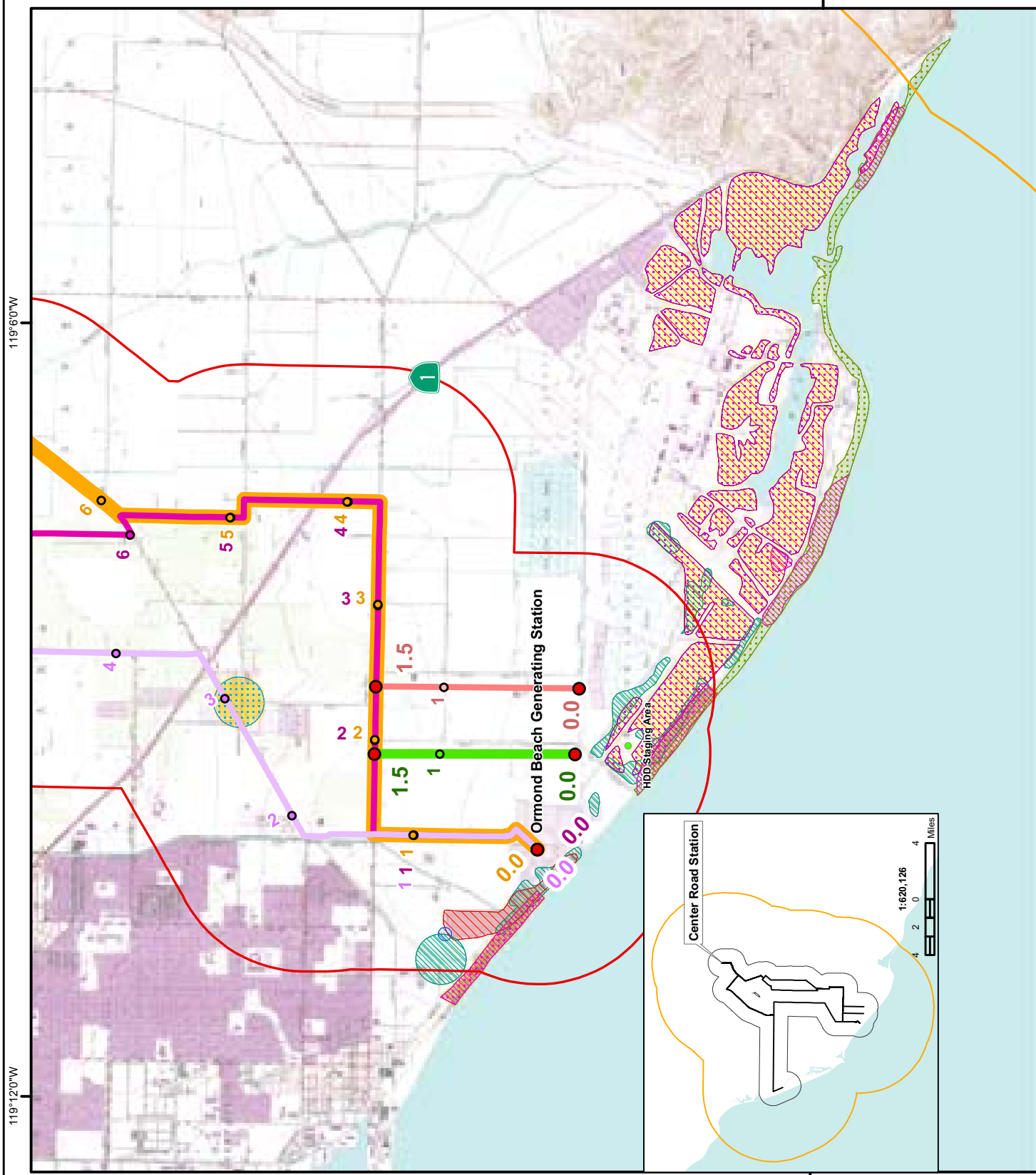
4.8.1.2 Oxnard Plain

The proposed Center Road Pipeline route and alternative routes under consideration traverse the Oxnard Plain for 14.3 miles (23 km), and terminate at the Center Road Valve Station. The proposed pipeline routes traverse agricultural fields and urban residential, commercial, and industrial areas.

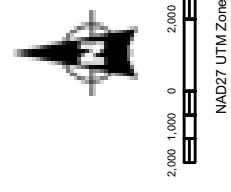
Surface Water Features

The proposed Project or alternative routes would cross agricultural drainages and flood control channels in the Oxnard Plain. The agricultural drainages are privately owned and operated, and may be subject to control by Section 404 of the CWA and under the jurisdiction of the USACE. The flood control channels crossed by the proposed Project are concrete-lined. The Ventura County Watershed Protection Agency is the agency responsible for maintaining flood control channels.

The “Water Quality and Sediments” Section (4.18) provides (Tables 4.18-2 and 4.18-3) a description of all surface water features crossed by the pipeline routes, which include agricultural drainages and flood control channels. Agricultural drainages are designed and maintained to provide irrigation water. Flow conditions depend on the type of crop currently in production. Maintenance of the agricultural drainages includes periodic dredging to deepen or reshape the channel, and vegetation control; therefore, these drainages do not provide long-term suitable habitat for native aquatic resources.



- Milepost
- Special Status Species Study Area
- Resource Area (1 mile)
- Center Road Pipeline
- Center Road Pipeline Alternative 1
- Center Road Pipeline Alternative 2
- Arnold Road Shore Crossing/Arnold Road Pipeline
- Point Mugu Shore Crossing/Casper Road Pipeline
- Santa Barbara Channel Alternative/Gonzales Road Pipeline
- Special Status Plants**
 - Coulter's goldfields
 - Salt marsh bird's-beak
- Special Status Wildlife**
 - Belding's savannah sparrow
 - California least tern
 - Globose dune beetle
 - Monarch butterfly
 - Wandering (saltmarsh) skipper
 - Western snowy plover
- Special Status Terrestrial Community**
 - Southern Riparian Scrub
- HDD Staging Area



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Figure 4.8-3
Special Status Plant, Wildlife, and Natural Communities within 5 mile radius of Pipeline, Ventura County

